

AMENDMENTS TO THE CLAIMS

1. (Thrice Amended) A network architecture for the management of [one or more of a plurality of storage devices] a storage area network by one or more clients independent of the storage area network comprising;

a storage area network comprising

a storage system including a plurality of storage devices;

a plurality of host computers connected to the storage system through a first communications network, each host computer including at least one agent for transmitting data to and retrieving data from one or more of the plurality of storage devices;

[one or more clients;] and

one or more storage management servers in communication with[, at least one agent, the one or more clients and] each of the plurality of host computers via its agent[storage devices] ;
and,

one or more clients independent of the storage area network , the one or more storage management servers being adapted to connect to the one or more independent clients via a web-based second communications network;

the one or more storage management servers providing information received from an agent and relating to [the] an operation status of the storage devices to the one or more independent clients via the second communications network and an object-oriented dynamic linking mechanism for ensuring that the at least one independent client is able to access the storage management server. so that the one or more clients can manage one or more storage devices of the plurality of storage devices.

2. (Amended) The network architecture of claim 1 wherein the storage management server includes:

a poller for gathering the information relating to the operation status of the storage device; and

a central repository for storing the information relating to [the] an operation status of said one of the storage devices; and

C an object server for distributing the information relating to the operation status of the storage devices to the clients.

3. (Amended) The network architecture of claim 1 wherein the poller polls each of the storage devices at predetermined intervals to maintain [the] a current status of the operation of each of the storage devices.

4. (Original) The network architecture of claim 3 wherein the predetermined interval is less than or equal to one minute.

5. (Amended) The network architecture of claim 1 wherein the storage management server further provides information relating to [the] an operation status of storage connectivity devices which connect storage devices to the clients.

6. (Amended) The network architecture of claim 5 wherein the storage management server includes:

a poller for gathering the information relating to the operation status of the storage device and storage connectivity devices; and

a central repository for storing the information relating to the operation status of said one of the storage devices and storage connectivity devices; and

an object server for distributing the information relating to [the] an operation status of the storage devices and storage connectivity devices to the clients.

7. (Amended) The network architecture of claim 6 wherein the poller polls each of the storage connectivity devices at predetermined intervals to maintain [the] a current status of [the] operation of each of the storage connectivity devices.

8. (Original) The network architecture of claim 1 wherein the storage management server further includes a security component for limiting access by a client to one or more of the storage devices.

9. (Original) The network architecture of claim 1 wherein the storage management server further includes a web server for communicating with the plurality of clients.

10. (Amended) The network architecture of claim 1 wherein each of the clients includes a graphical user interface for displaying the information relating to [the] an operation status of the storage devices.

11. (Original) The network architecture of claim 1 wherein the plurality of host computers are of different types.

12. (Original) The network architecture of claim 1 wherein the plurality of storage devices are of different types.

C 13. (Amended) The network architecture of claim 1 further comprising a plurality of storage management servers, each connected between the host computers and the plurality of clients, each storage management server, providing information relating to [the] an operation status of said one of the storage devices to at least one of the clients.

14. (Thrice Amended) The network architecture of claim 1 wherein each of the one or more storage management servers includes:

a poller for gathering information relating to [the] an operation status of the storage device; and

a central repository for storing information relating to the operation status of said one of the storage devices; and

an object server for distributing the information relating to the operation status of said one of the storage devices to the one or more clients, wherein the object server and the one or more clients communicate via an object-oriented dynamic linking mechanism.

15. (Amended) The network architecture of claim 14 further comprising a name server, connected to each of the plurality of storage management servers, to determine which of the central repositories of the plurality of storage management servers includes the information relating to [the] an operation status of said one of the storage devices.

C 16. (Thrice Amended) A method of managing a storage [system] area network by one or more clients independent of the storage area network including

a plurality of storage devices, the storage system communicating data to and from a plurality of host computers, wherein each host has at least one agent for communicating with the storage system,] a storage area network comprising

a storage system including a plurality of storage devices; a plurality of host computers connected to the storage system through a first communications network, each host computer including at least one agent for transmitting data to and retrieving data from one or more of the plurality of storage devices;

the method comprising:

providing a storage management server between

one or more of the independent clients and the plurality of storage devices, the storage management server being adapted to connect to the one or more independent clients via a web-

based second communications network and being in communication with each of the plurality of host computers via its agent;

providing to the storage management server from [the] at least one agent information relating to [the] a configuration of the storage system;

[collect] collecting, from the storage management server, information relating to the configuration of the storage system; and

C¹ providing by the storage management server, the information to at least one of the one or more independent clients, wherein the server and the at least one [or more] independent client [clients] communicate via an object-oriented dynamic linking mechanism for ensuring that the at least one independent client is able to access the storage management server.

17. (Amended) The method of claim 16 wherein providing information relating to the operation status of the storage devices includes using a poller to gather the information relating to the operation status of the storage device, the method further comprising storing the information relating to [the] an operation status of said one of the storage devices in a central repository of the storage management server.

18. (Amended) The method of claim 16 wherein providing information relating to the operation status of the storage devices includes using an object server to distribute the information relating to [the] an operation status of the storage devices to the clients.

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19. (Amended) The method of claim 16 wherein the poller polls each of the storage devices at predetermined intervals to maintain [the] a current status of the operation of each of the storage devices.

20. (Amended) The method of claim 16 further comprising providing information relating to [the] an operation status of storage connectivity devices which connect the hosts to the storage devices.

21. (New) The network architecture of claim 1 wherein the second communications network is an Intranet.

22. (New) The network architecture of claim 21 wherein the first communications network is a Fibre Channel network.

23. (New) The method of claim 16 wherein the second communications network is an Intranet.

24. (New) The method of claim 16 wherein the first communications network is a Fibre Channel network.
